Reply to: Office Action Dated December 16, 2004

Title: MULTI-LEVEL EXPEDITED FORWARDING PER HOP BEHAVIOR

## **REMARKS**

Applicant has reviewed the Office Action mailed December 16, 2004. Claims 23, 24, 25 and 26 are being added by this Response. Thus, claims 1-26 are pending in the application. Applicant hereby requests further examination and reconsideration of the application in view of the following remarks.

The added claims 23-26 find support throughout the specification of the instant application and add no new matter. For the reasons stated below, Applicant respectfully submits that the new claims are patentably distinct over the prior art. Therefore, Applicant respectfully requests that the new claims be allowed.

## Claim Rejection -- 35 U.S.C. §103

Claims 1-8, 10-14, 16-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 6,760,309 (hereinafter "Rochberger") in view of US Patent No. 2002/0105965 A1 (hereinafter "Dravida"). Applicant respectfully submits that the cited prior art does not support a §103(a) obviousness rejection for the following reasons.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP §2143, *In re Ryoka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). *See also In re Wilson*, 165 U.S.P.Q. 494 (C.C.P.A. 1970). Rochberger, as stated by the Examiner in the current action, is silent to disclosing "transmitting any information in said priority queue before transmitting any information in said at least one other output buffer queue", as recited in claims 1, 17, and 20. To cure this defect the Examiner offers Dravida, citing a section of paragraph [0277] on page 19 as disclosing the present invention's claimed transmission protocol. That same paragraph [0277] on page 19 of Dravida further states:

However, once a packet has been selected for transmission and the scheduler starts copying it into a transmit buffer, it does not interrupt this process to handle a higher priority packet which may have become ready for transmission in the meantime.

(Emphasis added). Thus, Dravida specifically teaches to the exclusion of the ability to copy information received into a priority queue into a transmit buffer after the scheduler has started copying. Therefore, it is possible that information in a higher priority packet may be delayed for

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the transmission of information in a lower priority packet due to the limitations of the Dravida system. "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." M.P.E.P. 2141.02, citing W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Thus, Dravida appears to specifically teach away from the claimed limitation of the instant application.

By contrast the instant application provides not only the scanning and transmitting capabilities as identified by the Examiner in the current action on page 19 [0277] of Dravida, but further may allow for the transmission of "any information in said priority queue before transmitting any information in said at least one other output buffer queue", as recited in claims 1, 17, and 20. This is supported in the instant application on page 19, lines 7-9, which state, "all the packets in the transmit buffer queues may not be transmitted before more packets are added to the transmit buffer, due to the interrupt nature of the test system." (Emphasis added). Thus, the present invention allows for the interruption of the transmission of lower priority information or information from one of the other output buffer queues in order to accommodate the priority transmission of information from a priority queue which may have become ready for transmission after the copying of the lower priority information had already begun. Therefore, Dravida does not cure the defect of Rochberger and neither reference alone or in combination teach or suggest the claimed limitations of the instant application. For the above reasons Applicant respectfully requests withdrawal of the §103(a) obviousness rejection and allowance of claims 1, 17, and 20. Further, based on the proper dependence of claims 2-9 upon claim 1, claims 18-19 upon claim 17, and claims 21-22 upon claims 20, Applicant respectfully requests withdrawal of the §103(a) rejection of claims 2-9, 18-19, and 21-22 and allowance of claims 2-9, 18-19, and 21-22.

As the Office is aware, obviousness cannot be established by combining the teaching of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984). Thus, the Office may not use the patent application as a basis for the motivation to combine or modify the prior art to arrive at the claimed invention.

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The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. .... It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Oetiker, 977 F.2d 1443, 24 USPQ 2d 1443 (Fed. Cir. 1992) quoting In re Fine, 837 F.2d 1071, 1075, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988).

In the present case, the Office has selected portions from two references to arrive at the present invention, in which, neither of the references supply the motivation for the additional reference as proposed. Rather, the references are relied upon for selected elements, but the desirability of the elements in the combination has not been supplied absent the present application. Rochberger assigns a time to live (TTL) tag to each packet of information and thus prioritizes the packets based on how young or old they are. Packets with relatively long(er) times to live are given a lower priority than those with relatively short(er) times to live. A TTL field is added to the packet and each network entity that receives the packet subtracts from the TTL field the time it spends passing through the entity. Thus, the TTL decreases as it hops from network entity to entity until it reaches its destination or is discarded. Dravida is directed to providing reliable, secure, bi-directional broadband access overcoming issues such as bottlenecking and congestion in the network through utilizing intelligent network elements to assign a RID of a network element which is inserted into a packet based on a destination MAC address for the packet. This is to increase the performance of typical communications networks, such as cable systems, which may include a headend (provider) connected to an Optical Network Unit (ONU) using optical fiber but the ONU connection to the homes (end users) uses coax cable such that the ONU connection to the homes creates a bottleneck and decreases network performance. Nowhere does the Rochberger or Dravida reference disclose, teach or suggest the desirability of modifying the TTL system of Rochberger by including the network application of Dravida. Since the references do not supply the desirability of the modification, it is respectfully submitted that a prima facie case of obviousness has not been established. Accordingly, Applicant respectfully requests the withdrawal of the §103(a) rejection and allowance of claims 1-9 and 17-22.

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The Examiner states in the current action that "it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Rochberger with the teaching of Dravida..." However, the courts have held:

Rarely, however, will the skill in the art component operate to supply missing knowledge or prior art to reach an obviousness judgment...Skill in the art does not act as a bridge over gaps in substantive presentation of an obviousness case, but instead supplies the primary guarantee of objectivity in the process. *Al-Site corp v. VSI Int'l, Inc.*, 174 F.3d 1308, 50 USPQ2d 1161, 1171 (Fed. Cir. 1999)

For the reasons stated above, particularly the absence of motivation within the prior art references themselves for combining their teachings to produce the present invention, Applicant respectfully submits that these prior art references do not and did not (at the time of the invention) make it obvious to modify the one with the other in order to arrive at the present invention claimed in the instant application.

As the Office is well aware, Applicants are required to seasonably challenge statements by the Office that are not supported on the record. M.P.E.P. §2144.03. Further, it is noted that "Official Notice" or as found in the current action the obviousness of modification of the prior art references to arrive at the present invention is to be limited to instances where the facts are "capable of instant and unquestionable demonstration as being well-known". §2144.03. This is not the present situation. First, in accordance with M.P.E.P. §904 it is presumed that a full search was conducted and this search is indicative of the prior art. The search failed to disclose a reference which would teach or suggest modifying the Rochberger reference to achieve the present invention wherein the transmission of information from the priority queue occurs before the transmission of information from other output buffer queues. Consequently, the search revealed that the asserted substitution is not well-known and therefore is not entitled to be relied upon in order to reject the present claimed invention. If the Office is unable to provide such a reference, and is relying on facts based on personal knowledge, Applicants hereby request that such facts be set forth in an affidavit from the Examiner under 37 C.F.R. 1.104(d)(2). Absent substantiation by the Examiner, it is respectfully requested that the rejection under 35 U.S.C. § 103 be withdrawn.

With respect to the §103(a) rejection of claim 10, "[i]f identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever

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issue." In re Rouffet, 149 F.3d 1350, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). The identification of claimed elements within the Rochberger and Dravida references does not negate patentability of the present invention. As stated above, these references fail to provide the motivation to combine absent the use of the instant application as a template and furthermore, teach away from the claimed invention in the instant application. To follow the Examiner's argument to its logical conclusion the public policy of the patent system, encouraging inventive endeavors through granting of limited time, exclusionary protections, would be thwarted. For these reasons the Applicant respectfully requests the withdrawal of the §103(a) obviousness rejection and allowance of claim 10. Furthermore, due to the proper dependence of claims 11-16 upon claim 10, claims 11-16 are submitted to be in condition for allowance and Applicant requests the withdrawal of the §103(a) rejection of claims 11-16.

Claims 15 and 9 were rejected under 35 U.S.C. §103(a) as being unpatentable over the combined system (Rochberger-Dravida) in view of US Patent No. 2003/0185217 (hereinafter "Ganti"). Applicant respectfully requests withdrawal of this rejection for the reasons stated above with respect to the Rochberger-Dravida system and that Ganti fails to cure the defects identified. Furthermore, Applicant respectfully requests the withdrawal of the this rejection because Ganti fails to disclose, teach or suggest "wherein said field comprises a Type of Service field and said indication of precedence comprises a Differentiated Services Code Point within said Type of Service filed," as recited in claims 15 and 9 of the instant application.

Ganti is directed to the setting up of a network where Label Switched Paths (LSP) through the network are enhanced to permit carriage of multiple classes of service. Paragraph [0075] of Ganti is identifying how the network Interior Gateway Protocol (IGP) advertises (identifies to the Label Edge Router (LER)) per-link, per-class allocated bandwidth (what is available and the route for it) wherein the per-class advertisements correspond to the Diff-serv PHB Scheduling Classes. Thus, in Ganti this advertisement is letting the LER or a first IP network know what type of transmission capabilities are available (different PHB classes) and how much bandwidth is associated with it in order to transmit to a second IP network. By contrast, the instant application recites an identifier/label which is transmitted as part of an information packet over a network, wherein the identifier/label provides the information packet with a priority indicator which determines it's per hop behavior or expedited forwarding protocol

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during transmission over the network. Therefore, Applicant respectfully requests withdrawal of the §103(a) rejection and allowance of claims 15 and 9.

As the Office is aware, obviousness cannot be established by combining the teaching of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984). Thus, the Office may not use the patent application as a basis for the motivation to combine or modify the prior art to arrive at the claimed invention.

The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. .... It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Oetiker, 977 F.2d 1443, 24 USPQ 2d 1443 (Fed. Cir. 1992) quoting In re Fine, 837 F.2d 1071, 1075, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988).

In the present case, the Office has selected portions from three references to arrive at the present invention, in which, none of the references supply the motivation for the additional reference as proposed. Rather, the references are relied upon for selected elements, but the desirability of the elements in the combination has not been supplied absent the present application. Since the references do not supply the desirability of the modification, it is respectfully submitted that a *prima facie* case of obviousness has not been established.

Similar to the arguments made with respect to the Rochberger-Dravida system, Ganti fails to provide a motivation to combine with the other references and thus does not support the §103(a) obviousness rejection made. Further, the alleged identification of a claimed element in the Ganti reference does not support the §103 rejection, as stated previously such a doctrine if followed to its logical conclusion would thwart the intent of the patent system and therefore would unduly hinder the usefulness of the patent system.

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## **CONCLUSION**

In light of the forgoing, reconsideration and allowance of the claims is earnestly solicited. Accordingly, notification to that effect is earnestly requested. In the event that issues arise in the application which may readily be resolved via telephone, the Examiner is kindly invited to telephone the prosecuting attorney, identified below, at (410) 347-8754 to facilitate prosecution of the application.

Respectfully submitted,

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Dated: February 9, 2005

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